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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte OLIVER GERSTENBERGER,
BERTHOLD SCHELL, ALEXANDER FUCHS, and
JAN FÖHRENBACH

Appeal 2015-004745
Application 13/177,982
Technology Center 3700

Before: JAMES P. CALVE, LEE L. STEPINA, and
FREDERICK C. LANEY, *Administrative Patent Judges*.

STEPINA, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134 from a rejection of claims 1, 5–7, 9, and 27–30. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

CLAIMED SUBJECT MATTER

The claims are directed to a cutting assembly for a chainsaw. Claim 1, reproduced below with emphasis added, is illustrative of the claimed subject matter.

> 1. A cutting assembly for a handheld motor-driven chainsaw, said cutting assembly comprising:
>
> a saw chain having a plurality of pivotally interconnected chain links wherein a portion of said chain links are drive links having respective drive bases;
>
> a guide bar having a peripheral edge defining a guide groove having side walls;
>
> said guide bar being configured to guide said saw chain along said peripheral edge;
>
> each one of said drive bases having side surfaces and being configured to be slidingly guided between said side walls of said guide groove under the formation of a friction pairing;
>
> a plurality of lubricant pockets formed in at least one of said side surfaces and being open toward the side wall of said guide groove corresponding to said one side surface and said lubricant pockets being otherwise closed;
>
> said one side surface having a flat sliding surface outside of said lubricant pockets which is configured to slide along the side wall of said guide groove corresponding thereto;
>
> *said lubricant pockets having a mean diameter (d) lying in a range of 0.6 mm up to and including 1.0 mm and a maximum depth (t} lying in a range of 0.06 mm up to and including 0.10 mm; and,*
>
> *said mean diameter (d) having a ratio to said maximum depth (t) of 5.0 up to and including 25.0.*

REFERENCES

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Hofmann	US 6,283,389 B1	Sept. 4, 2001

REJECTION

Claims 1, 5–7, 9, and 27–30 are rejected under 35 U.S.C. § 103(a) as unpatentable over Buchholtz and Hofmann.

OPINION

Referring to Figures 1–2C, 10, and 12, the Examiner finds that Buchholtz discloses most of the features recited in independent claims 1 and 30, but does not disclose the specific dimensions and the diameter-to-depth ratio of the recited pockets. Final Act. 2–3. However, the Examiner finds that Hofmann discloses lubricant pockets with a diameter of from 0.2 to 0.5 mm, a depth of from 0.02 to 0.05 mm, and a ratio of diameter to depth of from 4 to 25. Final Act. 3. The Examiner determines that it would have been obvious to modify the pockets of Buchholtz to have the dimensions of the pockets in Hofmann "in order to ensure that the pockets are sufficiently deep and wide to produce a sufficient lubrication." Final Act. 3. As claims 1 and 30 require a minimum depth of the pocket to be .06 mm and a minimum diameter of the pocket to be 0.6 mm, the Examiner further determines that it would have been obvious to modify the proposed combination of Buchholtz and Hofmann to meet this requirement as a matter of routine optimization of a result effective variable. Final Act. 3–4.

Appellants assert that as Hofmann is directed to an injection valve, and the claimed invention is directed to a cutter assembly for a chain saw, a person of ordinary skill in the art "would not consider [Hofmann] in an effort to arrive at [Appellants'] invention." Appeal Br. 12. In this regard,

Appellants argue that "a cutter assembly for a motor-driven chain saw requires a conveyance of lubricant over a longer path." Appeal Br. 13. In contrast, Appellants assert, in Hofmann, the lubricant centers the valve body, lubricant is not conveyed over a distance, and there is no loss of lubrication. *See* Appeal Br. 14.

In response, the Examiner states:

> Appellant's argument that Hofmann teaches an injection valve for fuel and is not related to a chain saw is not persuasive. Buchholtz already teaches substantially the claim invention including a chain saw having in chain links. Buchholtz merely is silent with regards to the diameter and the depth of the lubricant pockets. However, as stated above, Hofmann teaches lubricant pockets and specific dimension for the pockets as set forth in the claims. *The lubricant pockets of Hofmann are similar in shape and size and distance from one another to the lubricant pockets of Buchholtz. Hofmann teaches that the particular depth and diameter for the lubricant pockets provide a proper lubrication in the vicinity of the lubricant pockets. This concept is reasonably pertinent to the lubricant pockets of the same shape and size of Buchholtz.*

Ans. 7 (emphasis added).

In reply, Appellants assert that the Examiner's statement that Hofmann's disclosure of the dimensions of its pockets and the effect on lubrication is "reasonably pertinent" to the lubricant pockets of the same shape and size in Buchholtz is "not on point" because Hofmann is intended to operate in different conditions from those in which the device of Buchholtz operates. Reply Br. 5

As the Examiner's statement regarding whether Hofmann is "reasonably pertinent" implies,[1] Appellants' argument that a person of

[1] The Examiner's statement did not specifically mention whether Hofmann was reasonably pertinent *to the problem with which the inventors were*

ordinary skill in the art would not "consider" Hofmann amounts to an assertion that Hofmann is non-analogous art. Determining whether prior art is analogous requires consideration of "(1) whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved." *In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992) (citation omitted).

We find that Appellants' field of endeavor, cutting assemblies for chainsaws, is not the same as Hofmann's fuel injection valve for internal combustion engines. Accordingly, we address the second prong of the test discussed in *Clay*, whether Hofmann's disclosure is reasonably pertinent to the problem with which the inventors in this case were concerned.

Precedent provides guidance as to when a reference is reasonably pertinent to the problem:

> A reference is reasonably pertinent if . . . it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem. If a reference disclosure has the same purpose as the claimed invention, the reference relates to the same problem, and that fact supports use of that reference in an obviousness rejection.

Innovention Toys, LLC v. MGA Entm't, Inc., 637 F.3d 1314, 1321 (Fed. Cir. 2011) (citing *Clay*, 966 F.2d at 659). "The pertinence of the reference as a

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concerned and instead refers to the lubricant pockets of Buchholtz (and, therefore, the problem these pockets address). However, we understand the Examiner to use the correct rule regarding whether a reference is analogous art inasmuch as Buchholtz and Appellants' claimed assembly both address the problem of the occurrence of local dry friction in a cutting assembly. *See, e.g.*, Buchholtz ¶ 3; *see also* Spec. 1:10–2:16

source of solution to the inventor's problem must be recognizable with the foresight of a person of ordinary skill, not with the hindsight of the inventor's successful achievement." *Scientific Plastic Products, Inc. v. Biotage AB*, 766 F.3d 1355, 1359 (Fed. Cir. 2014).

We agree with Appellants' characterization of Hofmann as having an objective of "centering" a valve body. *See* Appeal Br. 12. In this regard, Hofmann states:

> The fuel injection valve for internal combustion engines according to the present invention, has the advantage over the prior art that a *tilting of the valve member and consequently a one-sided wear on the guide surfaces can be reliably prevented.* This is achieved in an advantageous manner through the provision of one more recesses producing a hydraulic wedge between the valve member and the guide bore in the valve body, and this hydraulic wedge extends over the essential part of the guide surface between the valve member and the bore and therefore hydraulically *centers the valve member* in the bore. These recesses in the guide surface of the valve member are preferably disposed in substantially even distribution over its circumference so that a uniform pressure compensation on the valve member is produced, which *prevents local pressure peaks* between the valve member and the guide bore and therefore reliably *prevents the one-sided introduction of lateral forces*.

Hofmann, 1:59–2:8 (emphases added). In contrast, Appellants' claimed arrangement solves the problem of the occurrence of local dry friction in a cutting assembly. *See, e.g.*, Spec. 1:10–2:16. Although the structure of the recesses disclosed by Hofmann is similar to the structure of the pockets recited in Appellants' claims, the specific purpose of these structures is different. Thus, we do not find Hofmann's disclosure to be reasonably pertinent to the problem with which Appellants were concerned. Accordingly, we agree with Appellants that a person of skill in the art would not have consulted Hofmann as proposed by the Examiner, and we reverse

the rejection of claims 1, 5, 6, 9, and 27–30 for this reason. Further, we are not persuaded that a skilled artisan, aware of Hofmann's teachings regarding lubrication pockets and their dimensions for fuel injection valves, would have been motivated to experiment and arrive at the claimed ranges for a chainsaw, which has very different operating conditions than Hofman's valve because it must convey lubricant over a path. *See* Reply Br. 4–5; Appeal Br. 12–17. It is not clear how a skilled artisan would have arrived at the claimed ranges based on the teachings of Hofman, particularly where Appellants disclose their pockets as dimensioned to produce a lubricant film at friction surfaces and to maintain lubricant reservoirs and turbulent flow areas. Spec. 4:3–5:8, 15:1–16:7, Fig. 7.

Independent claim 7 recites similar features to those discussed above regarding claims 1 and 30, except for the lubricant pocket having a depth ranging from 0.04 mm to 0.12 mm. Appeal Br. 21 (Claims Appendix). The Examiner relies on Buchholtz and Hofmann for the same features and reasoning as claims 1 and 30. Final Act. 4–6.[2] Appellants make similar arguments for the patentability of independent claim 7 to those discussed above regarding claim 1 (Appeal Br. 17–18), and for the same reasons discussed above, we reverse the rejection of claim 7 as unpatentable over Buchholtz and Hofmann.

DECISION

The Examiner's rejection of 1, 5–7, 9, and 27–30 is reversed.

REVERSED

[2] The Examiner recognizes that Hofmann's pocket depth of 0.02–0.05 mm is within the claimed range of 0.04–0.12 mm. The Examiner relies on routine optimization for the claimed diameter range. *See* Final Act. 5–6.